

CONCEPT OF DEATH IN CHILDREN

Title: The concept of death in children aged from 9 to 11 years: evidences through inductive and deductive analysis of drawings

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Authors

Juan Manuel Vázquez-Sánchez ^a; Manuel Fernández-Alcántara ^{b,c}; M^a Paz García-Caro ^{b,d}; M^a José Cabañero-Martínez ^e, Celia Martí-García ^{b,f} & Rafael Montoya-Juárez ^{b,d}

Affiliations

a Niño Jesús Hospital, Madrid, España.

b Mind, Brain and Behavior Research Center (CIMCYC), University of Granada

c Department of Health Psychology, University of Alicante, Spain

d Department of Nursing, University of Granada, Spain

e Department of Nursing, University of Alicante, Spain

f Department of Nursing, University of Malaga, Spain

Correspondence:

Manuel Fernández-Alcántara, Departamento de Psicología de la Salud. Carretera San Vicente del Raspeig s/n 03690, San Vicente del Raspeig (Alicante, Spain). E-mail: mfernandez@ua.es.

Keywords

children; culture; death education; expressive arts; memorials

Accepted for publication in Death Studies the 9th April 2018

**The concept of death in children aged from 9 to 11 years: evidences through
inductive and deductive analysis of drawings**

Abstract

The objective of the research was to analyze children's conceptualization of death through drawings, using a mixed approach which combines deductive and inductive qualitative analysis. The sample consisted of 99 children aged 9–11 years, who were asked to elaborate a drawing about their idea of death and to explain it to the researchers. Drawings were coded basing on Tamm and Granqvist's model (deductive analysis) and codes and categories were created and modified (inductive analysis). Three main categories were identified in the analysis and four sub-categories were modified and/or created: causes of death, good death, anxiety-fear and symbolization.

Introduction

Through childhood, children are going to face different kind of losses, including the death of a loved one. Approximately 4-7% of children will experience the death of a relative by the time they are sixteen years old (Talwar, Harris & Schleifer, 2011). The concept of death acquired by the child has an important influence on the trajectory of grief and loss (Renaud, Engarhos, Schleifer & Talwar, 2013). Currently, western society is not yet able to fully support and understand children's feelings and emotions associated with coping with loss and death.

It is now assumed that children will acquire four main dimensions of the concept of death through their development: (a) universality (all living beings will die one day), (b) irreversibility (death is a permanent state), (c) non-functionality/cessation (physical and psychological functions stop at the moment of death) and (d) causality (death is caused by the failure of bodily processes) (Bonoti, Leondari & Mastora, 2013; Labrell & Stefaniak, 2011; Panagiotaki, Nobes, Ashraf & Aubby, 2015). Different factors such as gender, family, school, religion, technology or culture seem to be related to the development of children's concept of death, being age one of the central elements (Krepia, Krepia, & Tsilingiri, 2017; Panagiotaki, Hopkins, Nobes, Ward & Griffiths, 2018). Three classical developmental stages of acquisition have been proposed: at the first stage (2-5 years) children cannot distinguish between live or death as states, and they cannot understand the irreversibility of death; at the second stage (5-9 years), they can understand death as the end of life but not as an irreversible state; finally, at the third stage (9 years and older), they are able to understand death as a definitive and inevitable fact (Nagy, 1959; Panagiotaki et al., 2018). The range of age between 9 and 11 years is critical to the development of these four dimensions, indicating that changes in the general concept of death during these years are more evident (D'Antonio, 2011).

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Moreover, qualitative approaches have been widely used to study the concept of death in children through their discourse and art-derived techniques (Anderson, Ellis & Jones, 2014). Using drawings and verbal descriptions to explore the concept of death, Tamm and Granqvist (1995) identified three main categories in children aged from 9 to 18. Firstly, some drawings were related to biological death, including those which depicted the death of the body, violence, the state of death or the moment of death. Secondly, children represented psychological aspects of death, including emotions and feelings about death such as sorrow, mental imageries and emptiness. Finally, children identified metaphysical aspects of death, expressing religious/spiritual or metaphysical subjects related to death such as the mystery of death, the tunnel phenomenon or depictions of heaven and hell. These categories have been maintained in further research after deductive analysis of death-related drawings and they have expanded the knowledge about children's death concept (Bonoti et al., 2013; Hubnik, 2000). For example, Bonoti et al. (2013) suggested that children with previous death experience produced more realistic drawings reflecting their own experience, in comparison with children with no previous death experience. In addition, Hubnik (2000) suggested that children without previous death experience tended to draw depictions based on information from TV or videogames, suggesting that children's view of death is related to social influences (Hubnik, 2000).

One of the main limitations of previous research is the descriptive analysis carried out: although depictions were included in categories, authors did not go deeper into emotional or affective aspects from children's discourse. In this case, each drawing is assigned to a previous established category from a theoretical model (i.e. Tamm and Granqvist, 1995). Nevertheless, one of the advantages of the qualitative approach is the possibility to obtain new information that emerges from the experience and discourse of

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participants, especially on inductive-based designs (Carverhill, 2002; Flick, 2014). For example, Martí-García et al. (2017) used an inductive qualitative approach on a classic Terror Management Theory task to analyze fear of death in young university students, providing additional information regarding previous deductive studies (Kastenbaum & Heflick, 2011). Instead of using previous categories, the inductive approach allowed the identification of a wide range of emotions and thoughts about death that were not included in the previous models (Martí-García et al., 2017). As far as we know, no previous study has combined deductive and inductive analysis to analyze the concept of death in children by using a methodology based on drawing.

Finally, this categorization seems to be associated to some variables, suggesting that culture influence could affect how children understand and express their concept of death. They include literature (Lee, Kim, Choi & Koo, 2014), school (Bering, Blasi & Bjorklund, 2005), place where they live (Nikolakopoulou et al., 2013; Panagiotaki et al., 2015), family rituals (Brooten et al., 2016) or the constant use of smartphones (Körmendi, 2015; Körmendi, Brutóczki, Végh & Székely, 2016).

Considering this previous background, the main objective of this research was to analyze children's conceptualization and understanding of death through drawings, using a mixed approach which combines deductive and inductive qualitative analysis. This intertwined approximation will allow the comparison and modification of classical research models (i.e. Tamm & Granqvist, 1995), and the inclusion of new categories that reflect children current vision of death and dying.

Method

Participants

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Children from 9 to 11 years old attending to one local public school with no religious affiliation in Granada (Spain) were invited to participate through convenience sampling. The final sample consisted of 99 children, 43 boys (43.43%) and 56 girls (56.56%) from three age groups: 9 ($n=31$), 10 ($n=27$) and 11 ($n=41$) pertaining from two classroom (A and B) in each age range.

Instruments

Children were individually asked to make a drawing about what the word “death” seemed for them and to write a brief commentary about their pictures at the end. Drawing techniques seem to be more useful than language to communicate with children (Wang & Pies, 2004). Drawings help children to develop complex concepts and to express feelings and fears (Anderson, Ellis & Jones, 2014; Backett-Milburn & McKie, 1999). In addition, is a basic strategy for counselors during the interventions with bereaved children and adolescents (Morgan & Roberts, 2010).

For drawing elaboration, each child received a blank sheet of paper, a pencil, an eraser and five colored pencils (blue, yellow, red, green and black) (Bonoti et al., 2013). Finally, for drawings analysis, a semi-structured interview was especially devised for the purpose of this study. It was composed of open and closed-ended questions. Firstly, children were asked to tell about what did they draw and why did they draw it (i.e. “Could you tell me what you drew?” or “Why did you decided to draw this?”). After that, the researcher asked children to explain details of their drawings (i.e. “Is there any detail in your picture you want to talk about or do you think is important?”). Finally, questions were oriented to test how children felt during the activity (i.e. “How did you feel during the activities we have done?”).

Procedure

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Children were assigned and they participated as normal classroom groups. During a lapse of two weeks, each group participated in two different sessions. In the first session, sociodemographic information was collected and researchers established an emotional bond with children. This is important, because relationship and context in research involving children may have an important influence in the results obtained (Randall, 2012). Therefore, an effort was made to minimize social differences with children. In this session, researchers introduced themselves as health care professionals that were conducting a study about drawings and feelings in childhood.

In the second session, children were asked individually to make a drawing and to write a brief commentary about it. It was emphasized that there were no correct or incorrect answers. After that, children were individually interviewed about their pictures and experiences in a private area. Two experts in qualitative research with previous experience in children interviews carried out the data collection. A researcher asked questions while the other transcribed children's answers *verbatim*. No audio recorders were used due to the short duration of the interviews (mean duration time of 5 minutes) and also to facilitate the emotional interaction with the child. In that way, the main researcher could pay full attention to the relationship with the child, without being associated to the institutional and school responsibilities or without being perceived as an authority figure (Rosen, 2015). The first session took place during the course of standard activities at school, and the second session had a mean duration of 30 minutes. The sessions were conducted during the school schedule (from 8.00 to 14.00 hours) and not a single child stated feeling tired or bored during the sessions.

The research team was composed by nurses and a clinical psychologist, all of them with experience and training in bereavement counseling and end-of-life care. None of them had previous relationship with the school. The school did not impose any

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restriction to the research, giving their full collaboration. After finishing the data analysis, the main findings were shared with parents and school's teachers in an informative session.

Ethical considerations

Prior to data collection, there were several contacts with school, teachers and parents through concerted meetings, where all doubts about the research were resolved. A series of authorizations and written informed consent were collected from University of Granada, school and families after meetings and prior each session each child gave verbal consent and was explicitly informed about the option of ceasing participation anytime during the interviews.

Research with children is a challenging task. Children are a particularly vulnerable population; therefore, the researcher must consider all the tools to protect children from suffering and to detect abuse (Randall, Anderson & Taylor, 2016). After each intervention the researchers had an individually debriefing session with children in which emotional support was provided if needed. They were asked about how did they feel about participating, and researchers invited children to share with them any experience or feeling they wanted. In order to guarantee the anonymity, participants were given a personal code based on age (09, 10 or 11), gender (male -M- or female -F-), participation group (A or B) and their participant number (i.e. 09MA11).

Data Analysis

The initial deductive analysis was carried out according to the system used by Tamm and Granqvist (1995). One of the researchers assigned each participant, using the combination of the three main sources of information at the same time (drawing, written commentary and interview), to one of the three superordinate categories (*Biological*

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death, Psychological death, and Metaphysical death), and to the different subordinate categories using a deductive approach (Padgett, 2008). No discrepancies were found regarding the source of information (drawing, written commentary or interview).

In addition, some drawings did not match the subordinate categories previously established. In these cases, the inductive approach was twofold and included: (a) the generation of new subordinate categories that emerged from the data, which reflected new aspects of the concept of death; and (b) the modifications and/or clarification of previous categories. A total of three researchers (JMVS, MFA and RMJ) participated in the process of coding generation and modification. In cases of disagreement, a series of debates among the researchers and a review of the literature were conducted to ensure that each new code was as close as possible to the participants' experience. This strategy was used to maintain the rigor and trustworthiness of the findings (Denzin & Lincoln, 2000). The software Atlas.ti 7.0® was used.

Results

The qualitative analysis identified three main categories (see Table 1): *Biological death* was the most frequently represented category while *Psychological death* and *Metaphysical death* were depicted by a similar number of drawings. Examples of the different elements analyzed (drawings, written commentaries and interview) will be described.

-----Insert Table 1 here-----

- *Biological death concept*

Biological death was the most frequently identified main category. All drawings in this category represented the dead body or the circumstances surrounding death. Two

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categories previously reported were also found in the present research: *The state of death* and *The moment of death*. A specific category of *Violent death* was not depicted, although children referred to different types of deaths, and a new category was named *Causes of death* (see Figure 1). During the interviews, children outlined their perspectives about different ways of dying: Death due to illness (*“Death from heart attack. You get sick, you go to the hospital and you die from heart attack”*: 09FA03.), Death due to age (*“I drew an old man who is in ambulance. We don’t know if he’ll survive or not”*. 11MA04), Death due to violence (*“I drew a representation of how bad is war, how destructive it is, how people suffer...”* 11MA06) and Accidents (*“You can hit your head and your skull may be broken..., your car can explode”* 11MB13).

-----Insert Figure 1 here-----

- *Psychological death concept*

Drawings in this superordinate category featured emotions associated with dying such as sadness, sorrow, anxiety, fear, anger, guilt, peace or liberation after suffering. The most represented subordinate category was *Sorrow* (see Figure 2). *Mental imageries* subordinate category was proposed by Tamm and Granqvist (1995) as a way to express negative feelings that death causes in people. However, children expressed not only imaging anxieties but also their own fears through drawings and interviews (*“He has a tear because, before falling, I didn’t want to die”* 11FB02, *“I drew a big tear and a girl that is very ill, just about to die. I drew remembrances about the reasons why she doesn’t want to die (...) I put other cloud here as you are before dying under a storm with you mind full of darkness”* 11FB07); so, this subordinate category was replaced by *Anxiety or fear* (Figure 2). None of the children identified in their drawings

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or in their discourse the ideas of darkness, emptiness, formlessness or similar mental states, so *Emptiness* was not represented in this study.

Finally, another subordinate category was created and it was named *Good death* (see Figure 2). The *Good death* category included reflections about the best conditions for dying and how it could affect the psychological state of the person who is dying and their relatives. Five children expressed in the interviews feelings and reflections about what a good death would be like for them. They talked about feelings about dying people, their families or how they think people could die in a good way (*"I drew a person who is dead but he had lived a very happy life"* 11FA11, *"I think death is, for an animal or a person, at first good because his suffering has finished"* 11MA03, *"I think a person dies when he/she doesn't want to live anymore and death doesn't have to be a sad thing"* 11MB06). Four of the five children whose drawings were coded in this category claimed during the interview that death could be positive for someone if he or she stops suffering in a physical or psychological way. Only one girl talked about a good death as a summary of a good and happy life.

-----Insert Figure 2 here-----

- *Metaphysical death concept*

This category includes representations of religious, cultural, or philosophical symbols. *Perceptions of heaven and hell* (see Figure 3) was the most frequently represented category. Tamm and Granqvist (1995) introduced *Personification* as anthropomorphized death, represented as the grim reaper, a skeleton or similar personifications. Most children remarked in the interviews their will to kill (*"Devil is bad. He has always been bad"* 10FB06, *"Death is devil's work. People don't die for no reason and much less if they aren't ill"* 09FA06, *"For representing death I decided to*

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depict a doll because the doll decides who is going to die and when” 11FB08).

Therefore, we decided to include these aspects in the description of the code (Figure 3).

The last subordinate category analyzed was *The mystery of death*. This category was modified due to the very different range of imageries used by children to express cultural, religious or personal symbols about death. Therefore, it was replaced by *Symbolization* (see Figure 3) including three different types of representations obtained from their written commentaries: *Object* (“*I drew a coffin with flowers because few months ago my granny died*” 10FB08, “*It is a doll that leads to infinite rest*” 11MB03, “*I drew a heart. Its black part symbolizes the pain we feel when someone dies, and the red part symbolizes that we love him/her although he/she is dead*” 11MA05), *Person* (“*I drew a policeman. My grandfather was a policeman and I did this to remind him*” 09MA01, “*I drew my brothers, me and my father because I love them so much and I know they could get ill and die*” 09FB02, “*I drew my granny, me when I was little and my little brother because my granny died six years ago and we were small*” 09FB04), and *Places and Situations* (“*Because of my great grandfather died in Granada’s cemetery... I decided to draw this*” 09FA09, “*I drew the field where my parents, their friends and my dog Katy are (...) When my father went out my dog Katy escaped and she get lost*” 11FB01).

-----Insert Figure 3 here-----

Discussion

The main objective of the present research was to analyze children’s concept and understanding of death through drawings, using a deductive and inductive qualitative analysis. Biological aspects of death were the most frequently represented superordinate category, in line with previous research (Bonoti et al., 2013; Hopkins, 2014; Hubnik,

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2000; Lee et al., 2014; Tamm & Granqvist, 1995). In addition, psychological and metaphysical conceptions tended to increase by age at the expense of biological aspects. Finally, some modifications were proposed regarding the main codes found in previous research (Bonoti et al., 2013; Hubnik, 2000; Tamm & Granqvist, 1995).

A total of four main modifications were performed on the original coding model of Tamm & Granqvist: (a) *Violent death* was replaced by *Causes of death* (which includes *Death due to illness*, *Death due to accident*, *Death due to age* and *Death due to violence*); (b) a new category of *Good Death* was included; (c) *Mental imageries* was replaced by *Anxiety or fear*; and (d) *Mystery of death* was substituted by *Symbolization*.

Firstly, different causes of death were reported in the research (not only the ones linked to violence). Most of drawings where included in *Death due to accident* subordinate category or *Death due to violence* subordinate category, in which children depicted violent scenes as war, terrorist attacks, murders or road accidents where people were experiencing a painful and bloody death. These modifications may be influenced by disparity and variety of violence that constantly appears in media and videogames (Huesmann & Taylor, 2006; Körmendi, et al., 2016).

Secondly, *Good death* was introduced as a new category. As far as we know, there are few studies that explored what is a good death for children. For example, de Moura, Costa, Amorim, da Silva & Collet (2015) studied the emotions about death of hospitalized children and adolescents with chronic diseases and found as main result intense feelings of fear of dying suddenly. Hendrickson & McCorkle (2008) analyzed the dimensions of the concept of good death from three different perspectives: the dying child, the child's family and the health care providers. They concluded that *good death* was a concept with an important variability between participants and that dying children

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prefer to die at home and have the possibility to say farewell to their loved ones (Hendrickson & McCorkle, 2008).

In addition, other studies have been designed to explore the concept of good death in healthy children. Yang (2013) explored through the Good Death Scale Concept (Yang & Lai, 2012) how Taiwanese children experienced good death. Their main findings included: the possibility of being surrounded by loved ones, the absence of regrets, physical wellness or advanced preparation (Yang, 2013). Children put emphasis on personal psychological and physical status in their perceptions of a good death more than on spiritual or rational concerns (Yang, 2013). These results are in line with the ones found in the present research, where participants linked a good death with the conditions in which people die, to how they have lived their life, to the decision making process, to positive emotions (such as having a good and happy life) and to the issue of suffering. These seem to indicate that children actively process and have abstract reflections about the process of death and dying. In addition, these thoughts may reflect personal experiences with familiar or loved ones suffering from terminal illness or end-of-life processes.

Thirdly, the category *Mental imageries* (defined as “drawings featuring a person thinking or imagining anxieties or other horrible things about death” Tamm & Granqvist, 1995, p. 210) was replaced by *Anxiety or fear*, to include children’s own fears. In this study, four children (all girls) depicted *Anxiety or fear* as the main subordinate category, however, 2 more children represented in their drawings or verbally expressed elements that could be included in the subordinate category *Anxiety or fear*. The main fear expressed was the own death or the loss of a loved one. All participants who talked about their fears to death during the interview, pointed out to the fact that they had never talked about death with their families. Previous research seems

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to suggest that children who had the opportunity to discuss emotions or sensitive issues such as death with their families, seem to have better communicative skills and have less fear than those children that can't speak about death and dying (Slaughter & Griffiths, 2007; Stylianou & Zembylas, 2016). We should also consider the obstacles that parents face to speak about death, and the negative impact of their fear, attitudes and avoidant coping strategies in the child's interpretation and representation of death (Siracusa et al., 2011).

Finally, the *Symbolization* category was proposed instead of *Mystery of death*. Tamm and Granqvist (1995) included in this category drawings meaning religious, cultural, or personal symbols as a mystery. However, most of the children who depicted drawings included in this category were able to talk about those symbols, not just in a mysterious or mystique way, but they also explained why they relate those symbols to their concept of death. Specifically, eight children depicted some kind of place or situation that represented the death for them, so their drawings were included in *Symbolization: Place or situation*. Most of them depicted real places such as a house or a graveyard that symbolizes a loved one who was dead. *The tunnel phenomenon*, defined by Tamm & Granqvist (1996), which was not represented in any picture, was included within the category of *Symbolization*.

This research has some limitations that need to be considered. First, the sample size should be increased and diversified in future research, by increasing the age range of children. Second, the purposive sampling may reduce the transferability of the findings. Finally, the interviews were not audio recorded. Although one of the researchers could transcribe without difficulties the whole discourse of the child, its usage in longer interviews regarding children's concept of death may be useful. Future studies may consider variables such as previous experience with death, differences

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between religious and non-religious schools, as well as other cultural, social or political aspects that may have an impact in the codes and categories that emerge from the data.

In conclusion, four central aspects of the concept of death in children were outlined in the present research: the variety of the causes perceived, the reflections that children made about what is a good death, the prevalence of anxiety and fear regarding psychological aspects of death and the use of abstract symbolization to represent it. Further investigation is required in order to verify how sociocultural variations could affect the acquisition and maturity of the conception of death among children. This information will be useful to parents, teachers and health professionals to support children during their development and in the prevention and intervention in grief and bereavement in childhood.

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Table 1. Superordinate and subordinate categories after the inductive-deductive analysis.

Super Ordinate Categories	Subordinate Categories	n	%
1. Biological death concept		40	40.40%
	A. The state of death	26	26.26%
	B. The moment of death	5	5.05%
	C. Causes of death	9	9.09%
	CI. Age	1	1.01%
	CII. Illness	1	1.01%
	CIII. Violence	3	3.03%
	C.IV Accident	4	4.04%
2. Psychological death concept		29	29.29%
	D. Sorrow	22	22.22%
	E. Anxiety or fear	4	4.04%
	F. Good death	3	3.03%
3. Metaphysical death concept		30	30.30%
	G. Perceptions of heaven and hell	10	10.10%
	H. Symbolization	13	13.13%
	HI. Object	2	2.02%
	HII. Person	3	3.03%
	HIII. Places or situations	8	8.08%
	I. Personification	7	7.07%

CONCEPT OF DEATH IN CHILDREN

Figure 1. Biological subordinate categories with interview quotations

The state of death

"The death" (09MB01)



Definition

Death is represented as a state. Children depicted person in a coffin, a funeral scene, or a graveyard.

Interview quote

"I drew a man who is dead and he's in the grave".

The moment of death

"Death" (11FA06)



Definition

Representations about the very moment of death, when the person stops breathing or the soul and the body are parted.

Interview quote

"(...) first, he has a heartbeat and when the line is straight, he doesn't. (...) He's dead."

Causes of death

"The losses" (11FB05)



Definition

Depicted elements try to explain causality relations between different events and death. We can differentiate among *Death due to illness*, *Death due to age*, *Death due to violence* and *Accidents*

Interview quote

"I drew the main causes of death because, of late, unemployment and terrorist attacks cause many deaths. On the other and, there are natural deaths."

CONCEPT OF DEATH IN CHILDREN

Figure 2. Psychological subordinate categories

Sorrow

"Death" (11FB07)



Definition

The drawings depicted people crying or feelings such as sadness or discomfort.

Interview quote

"They are sad about a loved one's death."

Anxiety or fear

"The death" (10FB06)



Definition

The children depicted or verbally expressed verbally feelings such as fear or anxiety about one's own or another's death.

Interview quote

"I drew that I was very ill until one day I died. I don't want to die, I'm scared."

Good death

"Holding the dead person"
(09FA04)



Definition

This category contains reflections about conditions in which people die and how it could affect the psychological state of the person who is dying and their relatives.

Interview quote

"Her daughter is holding and comforting her so she can die better."

CONCEPT OF DEATH IN CHILDREN

Figure 3. Metaphysical subordinate categories

Perceptions of heaven and hell

"The climb to the Heaven" (10MB09)

Definition

Heaven and hell was represented by religious or cultural symbols such as God, sky, angels, the devil, etc.

Interview quote

"He is in Heaven with Jesus. He has a ring, because when you're dead the ring comes up. They are holding hands."



Personification

"The death" (11MB12)

Definition

The drawings in this category anthropomorphize death. Death has the will to kill.

Interview quote

"I drew it (the character of death) because I think it's one of many ways of representing death."



Symbolization

"A. and my house" (11FA04)

Definition

This category contains cultural, religious or personal symbols about death including three types of representations: *Object*, *Person* and *Place and Situations*.

Interview quote

"My uncle is very special in my family, he has been very loved and he's very important because he built my house. He's very important so I decided to draw this picture."

